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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,512	12/17/2003	Sylvie Lambardin	MGRN:416	6200

6160 7590 08/10/2005

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EXAMINER	
LEJA, RONALD W	
ART UNIT	**PAPER NUMBER**
2836	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/736,512	LAMBARDIN ET AL.	
	Examiner	Art Unit	
	Ronald W. Leja	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Independent Claims now contain the following phrase "match(ing) a set of defined fault signals including impulsion peaks", which does not appear to have support in the originally filed Disclosure. Applicants, in their Response of 5/18/2005, allege support to Figures 4D and 4E. However, the Examiner is not sure whether "impulsion peaks" is a real term in the first place. The Examiner is aware of "impulse noise", which is characterized by high amplitude and short duration. The signals in Figures 4D and 4E are disclosed as being truncated sinusoidal waves; such waves cannot be reasonably considered as "Impulse waveforms". "Impulsion peaks" may suggest high amplitude and short duration waveforms, which would have to clearly be much different from the truncated sinusoids found in Figures 4D and 4E.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wellman, Jr. et al. (4,370,692).

Wellman, Jr. et al. disclose in Figures 1 & 2, a leakage protection device protecting an electrical switchgear unit comprising main conductors (L1,L2,N) and contacts (48,50) in series, a measuring torroid (54) and trip relay (64). Figure 2 illustrates an input at (56), a comparison means (120), processing means (128) to command a trip relay (64), rectifying means (112) and filtering means (114,119). Wellman, Jr. et al. specifically recite matching at least a set (of one) defined fault signals, namely above 200milliamperes (see Col. 8, lines 16-25). However, Wellman, Jr. et al. are somewhat silent with respect to impulsion peaks and the cut-off frequency of the filter and although they disclose an amplifier (90) receiving input signals, a signal rectifier connected to the output of the amplifier (112), filter means (114,119), a comparator (120) connected to the filtering means, control means having a time delay and tripping control output (128, 62, 64) (see also Col. 31-51), and wherein, (90) and (120) are integrated on the same chip, Wellman, Jr. et al. do not indicate that all the components comprise an integrated circuit. However, it is the

opinion of the Examiner, that it would have been obvious to pick the appropriate anticipated fault signals, such as, impulsion peaks, to protect the particular load and system-at-hand from, thereby ensuring that particular load and system were protected from the anticipated fault signals, leading to more reliable performance. It also would have been obvious to choose a cut-off frequency (such as between 2 and 4 times the fundamental frequency) for the low-pass filter so as to meet the desired accuracy level of protection deemed necessary for the particular application-at-hand and integration of most if not all components would have been obvious as a means to save in space consideration, leading to a more compact overall design.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wellman, Jr. et al. in view of Katz et al. (5,642,427).

Claim 4 is essentially drawn to the partial integration of the filtering means wherein the resistive part is within the integrated circuit and the capacitive part is external to the integrated circuit. Wellman, Jr. et al. disclose that amplifiers (90)&(120) are integrated upon a single chip, but are otherwise silent. However, Katz et al. teach an integrated circuit wherein filtering means are offered on the chip (via an all pass filter op-amp) and that such filtering can be adjusted via resistors and/or capacitors externally to the chip. Therefore, it is the opinion of the Examiner that providing a portion of the filtering means, such as, a capacitive element, externally to the integrated circuit, would have been obvious as a means to offer adjustment abilities of the filtering qualities.

Applicant's arguments filed 5/18/2005 have been fully considered but they are not persuasive. Applicants arguments essentially revolve around "the added new matter", and as such, are not persuasive.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W. Leja whose telephone number is (571)272-2053. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald W. Leja

Ronald W Leja
Primary Examiner
Art Unit 2836

8/7/05

rwl
August 7, 2005